

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-20 are pending in this application.

Rejections Under 35 U.S.C. §103:

Claims 1-7 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Koluvek (U.S. '253). Applicant respectfully traverses this rejection.

In order to establish a prima facie case of obviousness, all of the claim limitations must be taught or suggested by the prior art. Koluvek fails to teach or suggest all of the claim limitations. For example, Koluvek fails to teach or suggest “wherein the switch connects the malfunction detecting circuit in parallel with the sensor in a time period, and disconnects the malfunction detecting circuit from the sensor in another time period,” as required by independent claim 1 and claims 2-15 which depend therefrom.

The above claimed limitation is supported by, for example, page 21, lines 4-21 of the originally-filed specification. Through this limitation, a period in which a signal for oil deterioration detection is detected is separated from a period in which a signal for sensor malfunction is detected. Associated circuitry can thus receive the signal for determining oil deterioration separately from the signal for malfunction determination. This circuitry can thus receive these two signals independently. The signal for determining oil deterioration and the signal for

sensor malfunction can thus be formed by a direct current signal so that the associated circuitry may be commonly used, thereby simplifying its construction.

Koluvek discloses a field effect transistor 94 for generating an alternating current superimposed on a measured signal to diagnosis the condition of glass cell 14 of electrode 13. For example, col. 4, lines 2-8 of Koluvek discloses:

“A signal at the switch terminal 100 will turn the field effect transistor 94 on thereby supplying a pulse signal to the transmitter circuitry 10. When the field effect transistor 94 is energized repetitively, a pulsed or alternating signal is supplied to the probe 12 for use in diagnosing the condition of the glass cell 14....”

In Koluvek's system, it is thus necessary to separate an alternating current component from a direct component to determine the condition of the glass cell 14. The circuitry of the signal receiver must therefore be complicated. Koluvek thus fails to teach or suggest switching the malfunction detecting circuit so that the switch is closed in order to electrically connect a sensor in parallel with the malfunction detecting circuit; wherein the switch connects the malfunction detecting circuit in parallel with the sensor in a time period and disconnects the malfunction detecting circuit with the sensor in another time period.

Accordingly, Applicant respectfully requests that the rejection of claims 1-7 under 35 U.S.C. §103 over Koluvek be withdrawn.

Claims 8, 9 and 15 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Koluvek in view of Kiyoshi and Tamagawa et al (hereinafter

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“Tamagawa”). Claim 10 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Koluvek and Tamagawa. Claim 12 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Koluvek in view of Dietz et al (hereinafter “Dietz”). Applicant respectfully traverses these rejections. Claims 8-9, 10, 12 and 15 depend from independent claim 1. None of the above noted secondary and/or tertiary references (Kiyoshi, Tamagawa and/or Dietz) remedies the above described deficiencies of Koluvek. Applicant therefore respectfully requests that the above rejections under 35 U.S.C. §103 be withdrawn.

New Claims:

New claims 16-20 have been added to provide additional protection for the invention. New independent claim 16 requires, *inter alia*, “wherein the switch connects the malfunction detecting circuit in parallel with the sensor in a time period and disconnects the malfunction detecting circuit with the sensor in a separate time period so that oil deterioration evaluation and sensor malfunction detection can be performed in separate time periods.”

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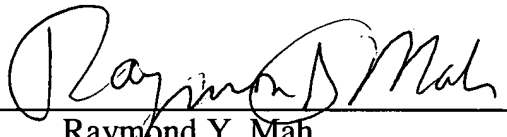
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Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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